

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A signal processing device comprising:

processing region setting means for setting a processing region within image data wherein a light signal of the real world is projected on a plurality of pixels, each having a time integration effect, and a portion of the continuity of the light signal of the real world is lost;

movement vector setting means for setting movement vectors for an object within said image data corresponding to the continuity of the light signal of the real world, wherein a portion of the continuity of said image data is lost;

model generating means for modeling the relation between the pixel value of each of the pixels within said processing region and the pixel value of each of the pixels without said movement blurring occurring, assuming that the pixel value of each of the pixels within said processing region is a value wherein the pixel value of each of the pixels without movement blurring occurring which correspond to said object is integrated while shifting corresponding to said movement vector;

normal equation generating means for generating a normal equation using a first equation wherein the pixel value of each of the pixels within said processing region is substituted into ~~as to~~ a model generated by said model generating means, and a second equation which constrains the relation between each of the pixels without said movement blurring occurring; and

actual world estimating means for estimating a pixel value of each pixel wherein said movement blurring is not occurring, by computing said normal equation which is generated by said normal equation generating means.

Claim 2 (Currently Amended): The signal processing device according to claim 1, wherein said normal equation generating means generates a normal equation using a first equation wherein the pixel value of each of the pixels within said processing region is substituted into ~~as to~~ the model generated by said model generating means, and a second equation wherein the difference of the pixel value of each pixel wherein said movement blurring is not occurring.

Claim 3 (Currently Amended): A signal processing method comprising:

~~a processing region setting step for~~ setting a processing region within image data wherein a light signal of the real world is projected on a plurality of pixels, each having a time integration effect, and a portion of the continuity of the light signal of the real world is lost;

~~a movement vector setting step for~~ setting movement vectors for an object within said image data corresponding to the continuity of the light signal of the real world, wherein a portion of the continuity of said image data is lost;

~~a model generating step for~~ modeling the relation between the pixel value of each of the pixels within said processing region and the pixel value of each of the pixels without said movement blurring occurring, assuming that the pixel value of each of the pixels within said processing region is a value wherein the pixel value of each of the pixels without movement blurring occurring which correspond to said object is integrated while shifting corresponding to said movement vector;

~~a normal equation generating step for~~ generating a normal equation using a first equation wherein the pixel value of each of the pixels within said processing region is substituted into ~~as to~~ a model generated by ~~the processing in~~ said modeling ~~model generating~~

~~step~~, and a second equation which constrains the relation between each of the pixels without said movement blurring occurring; and

~~an actual world estimating step for~~ estimating a pixel value of each pixel wherein said movement blurring is not occurring, by computing said normal equation which is generated by ~~the processing in said generating normal equation generating step~~.

Claim 4 (Canceled).

Claim 5 (Currently Amended): A computer readable recording medium including computer executable instructions, wherein the instructions, when executed by a processor, cause the processor to perform a method ~~wherein a program is recorded for a computer to perform predetermined signal processing~~ comprising:

~~a processing region setting step for~~ setting a processing region within image data wherein a light signal of the real world is projected on a plurality of pixels, each having a time integration effect, and a portion of the continuity of the light signal of the real world is lost;

~~a movement vector setting step for~~ setting movement vectors for an object within said image data corresponding to the continuity of the light signal of the real world, wherein a portion of the continuity of said image data is lost;

~~a model generating step for~~ modeling the relation between the pixel value of each of the pixels within said processing region and the pixel value of each of the pixels without said movement blurring occurring, assuming that the pixel value of each of the pixels within said processing region is a value wherein the pixel value of each of the pixels without movement blurring occurring which correspond to said object is integrated while shifting corresponding to said movement vector;

~~a normal equation generating step~~ for generating a normal equation using a first equation wherein the pixel value of each of the pixels within said processing region is substituted into ~~as to~~ a model generated by ~~the processing in~~ said modeling model generating step, and a second equation which constrains the relation between each of the pixels without said movement blurring occurring; and

~~an actual world estimating step~~ for estimating a pixel value of each pixel wherein said movement blurring is not occurring, by computing said normal equation which is generated by ~~the processing in~~ said generating normal equation generating step.

Claim 6 (New): A signal processing device comprising:

a processing region setting unit configured to said a processing region within image data wherein a light signal of the real world is projected on a plurality of pixels, each having a time integration effect, and a portion of the continuity of the light signal of the real world is lost;

a movement vector setting unit configured to set movement vectors for an object within said image data corresponding to the continuity of the light signal of the real world, wherein a portion of the continuity of said image data is lost;

a model generating unit configured to model the relation between the pixel value of each of the pixels within said processing region and the pixel value of each of the pixels without movement blurring occurring, assuming that the pixel value of each of the pixels within said processing region is a value wherein the pixel value of each of the pixels without movement blurring occurring which correspond to said object is integrated while shifting corresponding to said movement vector;

a normal equation generating unit configured to generate a normal equation using a first equation wherein the pixel value of each of the pixels within said processing region is

substituted into a model generated by said model generating unit, and a second equation which constrains the relation between each of the pixels without said movement blurring occurring; and

an actual world estimating unit configured to estimate a pixel value of each pixel wherein said movement blurring is not occurring, by computing said normal equation which is generated by said normal equation generating unit.

Claim 7 (New): The signal processing device according to claim 6, wherein said normal equation generating unit is configured to generate a normal equation using a first equation wherein the pixel value of each of the pixels within said processing region is substituted into the model generated by said model generating unit, and a second equation wherein the difference of the pixel value of each pixel wherein said movement blurring is not occurring.